1. In a data processing system including a host device for generating commands during the processing of a host application and first and second disk storage devices, a method for copying data from a set predetermined locations in the first disk storage device to a set of corresponding predetermined locations in the second disk storage device in response to a command from a host application identifying the predetermined locations, said method comprising the steps in sequence of:

A) establishing an operating environment by generating a first list of the predetermined locations in the first disk storage device and a second list of the corresponding predetermined locations in the second disk storage device,

B) making the predetermined locations in the first and second disk storage devices available for use by host applications, and

C) copying the data from the first disk storage device predetermined locations in an ordered manner including, for each predetermined location in the first disk storage device:

i) copying the data from a predetermined location in the first disk storage device to the corresponding predetermined location in the second disk storage device, and

ii) updating the first and second lists to indicate that the data has been transferred from the predetermined locations in the first disk storage device.

2. A method as recited in claim 1 additionally comprising the step of deleting the operating environment after said copying has been completed for all the predetermined locations.

3. A method as recited in claim 2 wherein a host application generates as one command a write request to transfer data from the host application to an identified predetermined location in the first disk storage system during said ordered copying, said method including the steps of:

i) interrupting said ordered copying in response to the request,

ii) copying data from the identified predetermined location in the first disk storage device to the corresponding predetermined location in the second disk storage device,

iii) re-enabling said ordered copying upon completion of said data copying, and

iv) completing the data transfer to the identified predetermined location in the first disk storage device in response to the write request.

4. A method as recited in claim 2 wherein a host application generates as one command one of read and write requests to transfer data between the host application and an identified predetermined location in the second disk storage device during said ordered copying, said method including the steps of:

i) interrupting said ordered copying in response to the request,

ii) copying data to the identified predetermined location in the second disk storage device from a corresponding predetermined location in the first disk storage device,

iii) re-enabling said ordered copying upon completion of said data copying, and

iv) completing the transfer between the host application and the identified predetermined location in the second disk storage device.

5. A method as recited in claim 2 wherein each disk storage device storage device includes at least one logical volume that comprises a plurality of tracks, said method enabling

the copying of data in a track extent comprising a portion of the tracks in the logical volume wherein:

i) said first list generation includes generating a list of all the tracks in the logical volume in the first disk storage device with an indication of whether each track is in the track extent, and

ii) said second list generation includes generating a list of all tracks in the second disk storage device with an indication of whether each track is to receive a data from the track extent of the first disk storage device.

6. A method as recited in claim 5 wherein a host application generates as a command a write request to transfer data from the host application to an identified track in the first disk storage device during said ordered copying, said method including the steps of:

i) interrupting said ordered copying in response to the write request,

ii) copying the data in the identified track of the first disk storage device to a corresponding track in the second disk storage device,

iii) clearing the corresponding first block indications in the first and second lists,

iv) re-enabling said ordered copying upon completion of said data copying, and

v) completing the transfer of data from the host application to the specifically identified track in the first disk storage device.

7. A method as recited in claim 5 wherein a host application generates as a command one of read and write requests to transfer data between the host application and an identified track in the second disk storage device during said ordered copying, said method including the steps of:

i) interrupting said ordered copying in response to the request,

ii) copying the data to the identified track in the second disk storage device from a corresponding track in the first disk storage device,

iii) clearing the corresponding track indications in the first and second lists,

iv) re-enabling said ordered copying upon completion of said data copying, and

v) completing the transfer between the host application and the identified track in the second disk storage device.

8. A data storage facility that connects to a host device that generates commands during the processing of host applications wherein said data storage facility is adapted for copying data from a set of predetermined locations in a first disk storage device to a set of corresponding predetermined locations in a second disk storage device in response to a predetermined command from a host application identifying the predetermined locations in said first and second disk storage devices, said facility comprising:

A) means responsive to the predetermined command for establishing an operating environment by generating a first list of the predetermined locations in the first disk storage device and a second list of the predetermined locations in the second disk storage device,

B) means for enabling interaction of commands with the first and second disk storage devices and the host applications, and

C) means for copying the data from the first disk storage device predetermined locations to corresponding locations in the second disk storage device in an ordered manner, and

D) means responsive to said copying means for updating the first and second lists to indicate data that has been transferred by said copying means.

9. A data storage facility as recited in claim 8 additionally comprising the step of deleting the operating environment after said copying has been completed for all the predetermined locations.

10. A data storage facility as recited in claim 9 wherein a host application generates as one command a write request to transfer data from the host application to an identified predetermined location in the first disk storage device during said ordered copying, said copying means including:

i) a copy program,

ii) means for operating said copy program in an ordered copying mode,

iii) means for interrupting said ordered copying operating means in response to a write request and enabling said copy program to copy data from the identified predetermined location in the first disk storage device to a corresponding location in the second disk storage device,

iv) means for re-enabling said ordered copying upon completion of said data copying, and

v) means for completing the data transfer to the identified predetermined location in the first disk storage device in response to the write request.

11. A data storage facility as recited in claim 9 wherein a host application generates as one command one of read and write requests to transfer data between the host application and an identified predetermined location in the second disk storage device during the operation of said ordered copying means, said ordered copying means including:

i) a copy program,

ii) means for operating said copy program in an ordered copying mode,

iii) means for interrupting said ordered copying in response to any of the read and write requests with the predetermined locations in the second disk storage device thereby to enable said copy program to copy data from a predetermined location in the first disk storage device that corresponds to the identified predetermined location in the second disk storage device,

iv) means for re-enabling said ordered copying upon completion of said data copying, and

v) means for completing the transfer between the host application and the identified predetermined location in the second disk storage device.

12. A data storage facility as recited in claim 9 wherein each disk storage device storage device includes at least one logical volume and each logical volume comprises a plurality of tracks, wherein said copying means is enabled to copy of data in a track extent comprising a portion of the tracks in a logical volume and wherein said operating environment establishment means includes:

i) first list generating means for generating a list of all the tracks in the logical volume in the first disk storage device with an indication of whether each track is in the track extent, and

ii) second list generating means for generating a list of all tracks in the second disk storage device with an indication of whether each track is to receive a data from the track extent of the first disk storage device.

13. A data storage facility as recited in claim 12 wherein a host application generates as one command a write request to transfer data from the host application to an identified track in the first disk storage device during said ordered copying, said copying means including:

i) a copy program,

ii) means for operating said copy program in an ordered copying mode,

iii) means for interrupting said ordered copying means in response to a write request thereby to enable said copy program to copy the data in the identified track of the first disk storage device to a corresponding track in the second disk storage device,

iv) means for re-enabling said ordered copying upon completion of said data copying from the identified track of the first disk storage device, and

v) completing the transfer of data from the host application to the specifically identified track in the first disk storage device.

14. A data storage facility as recited in claim 12 wherein a host application generates as one command one of read and write requests to transfer data between the host

application and an identified track in the second disk storage device during said ordered copying, said ordered copying means including:

i) a copy program,

ii) means for operating said copy program in an ordered copying mode,

iii) means for interrupting the ordered copying by said copy program in response to the request thereby to enable said copy program to copy the data in a track in the first disk storage device corresponding to the track in the second disk storage device identified in the request,

iv) means for re-enabling said ordered copying upon completion of said data copying, and

v) means for completing the transfer between the host application and the identified track in the second disk storage device.

15. In a system including a host for generating commands during the processing of a host application, a method for copying data from predetermined locations in a source disk storage device to corresponding predetermined locations in a destination disk storage device in response to a host command identifying the predetermined storage locations, said method comprising the steps in sequence of:

A) identifying the predetermined locations in the source disk storage device and corresponding predetermined locations in the destination disk storage device,

B) making the predetermined locations in the source and destination disk storage devices available for use by a processor device, and

C) copying data from each predetermined location in the source disk storage device to a corresponding predetermined location in the destination disk storage device in an ordered manner, and

D) updating the corresponding source and destination disk storage device location identifications to indicate that the data has been transferred from the first disk storage device.

16. A method as recited in claim 15 additionally comprising the step of deleting the identifications after said copying has been completed for all the predetermined locations.

17. A method as recited in claim 16 wherein a host generates as one command a write request to transfer data from the host application to an identified predetermined location in the source disk storage device during said ordered copying, said method including the steps of:

i) interrupting said ordered copying in response to the write request,

ii) copying data from the identified location in the source disk storage device to a corresponding location in the destination disk storage device,

iii) re-enabling said ordered copying upon completion of the data copy, and

iv) completing the transfer of data from the host application to the identified location in the source disk storage device.

18. A method as recited in claim 16 wherein a host processor device generates as one command one of read and write requests to transfer data with an identified location in the destination disk storage device during said ordered copying, said method including the steps of:

i) interrupting said ordered copying in response to the request,

ii) copying data to the identified predetermined location in the destination disk storage device from a corresponding location in the source disk storage device,

iii) re-enabling said ordered copying, and

iv) completing the transfer of data between the host application and the identified location in the destination source disk storage device.

19. A method as recited in claim 16 wherein each of source and destination disk storage devices normally stores data in a logical volume comprising a plurality of tracks, said method enabling the copying of data in a track extent that contains a portion of the tracks in a logical volume wherein:

i) said first list identification includes generating a list of all the tracks in a logical volume included in the track extent, and

ii) said second list identification includes generating a list of all the tracks of the logical volume in the destination disk storage device that are to receive data from the track extent.

20. A method as recited in claim 19 wherein, in response to a write request from a host application to an identified track in the source disk storage device during said ordered copying, said method:

i) interrupts said ordered copying,

ii) copies the data in the identified track of the source storage device to the corresponding track in the destination storage location,

iii) clears the corresponding track indications in the first and second lists, and

iv) re-enables said ordered copying,

v) completes the transfer of data from the host application to the identified track in the source disk storage device.

21. A method as recited in claim 19 wherein, in response to one of read and write requests to an identified track in the destination disk storage device during said ordered copying, said method:

i) interrupts said ordered copying,

ii) copies the data to the identified track in the destination disk storage device from a corresponding track in the source disk storage device,

iii) clears the corresponding track indications in the first and second lists, and

iv) re-enables said ordered copying,

v) completes the transfer of data between the host application and the identified track in the destination source disk storage device.

22. In a system including at least one host that generates input-output commands, apparatus for copying data from predetermined locations in a source disk storage device to corresponding locations in a destination disk storage device in response to a predetermined one of the commands identifying the predetermined storage locations, said apparatus comprising:

A) first identifications of the predetermined locations in the source disk storage device and second identifications of the corresponding locations in the destination disk storage device,

B) means for enabling interaction of the host commands within the source and destination disk storage devices, and

C) means for copying data from the predetermined locations in the source disk storage device to the corresponding locations in the destination disk storage device in an ordered manner, and

D) means responsive to said copy means for updating the first and second identifications to indicate that the data has been transferred from the source disk storage device.

23. A system as recited in claim 22 additionally comprising means for deleting the first and second identifications after the said copy means completed the copy operation for all the predetermined locations.

24. A system as recited in claim 23 wherein said ordered copying means includes:

i) means responsive to a write request from a host application requesting a transfer of data to an identified location in the source disk storage device for interrupting the operation of said ordered copying means,

ii) means for copying data in the identified source storage location to a corresponding location in the destination disk storage device,

iii) means for re-enabling said ordered copying,

iv) means for completing the transfer of data from the host application to the identified location in the source disk storage device.

25. A system as recited in claim 23 wherein said ordered copying means includes:

i) means responsive to one of read and write requests for transferring data between the host application and an identified location in the

destination storage device during said ordered copying for interrupting the operation of said ordered copying means,

ii) means for copying data to the identified location in the destination disk storage device from a corresponding location in the source disk storage device,

iii) means for re-enabling said ordered copying means, and

iv) means for completing the transfer of data between the host application and the identified location in the destination disk storage device.

26. A system as recited in claim 23 wherein data in the source and destination disk storage devices is stored in tracks and normally copied by logical volumes that comprise a plurality of tracks and wherein said system enables the copying of the data from a track extent that includes a portion of the tracks in a logical volume, wherein:

i) said first identification means includes means for generating a list of all the tracks included in a logical volume for the source disk storage device with an indication of whether each track is in a track extent, and

ii) said second identification means includes means for generating a list of all the tracks included in a logical volume for the destination disk storage device with an indication of whether each track is to receive data from a track in the source disk storage device.

27. A system as recited in claim 26 wherein said ordered copying means includes:

i) means responsive to a write request for transferring data from a host application to an identified track in the source disk storage device for interrupting the operation of said ordered copy means,

ii) means for copying data in the identified track in the source disk storage device to a corresponding track in the destination disk storage and

iii) means for re-enabling said ordered copy means, and

iv) means for completing the transfer of data from the host application to the identified track in the source disk storage device.

28. A system as recited in claim 26 wherein said ordered copy means includes:

i) means responsive to one of read and write requests for transferring data between a host application and an identified track in the destination disk storage device during said ordered copying for interrupting the operation of said ordered copying means,

ii) means for operating said copy means to copy data to the identified track in the destination disk storage device from a corresponding track in the source disk storage device,

iii) means for re-enabling said ordered copy means, and

iv) means for completing the transfer of data between the host application and the identified location in the destination disk storage device.